

NOUN
NATIONAL OPEN UNIVERSITY OF NIGERIA

Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja
Faculty of Science

DEPARTMENT OF BIOLOGICAL SCIENCES

2024 1 EXAMINATION

COURSE CODE: BIO 301

COURSE TITLE: GENETICS II

GCREDIT: 3 Units

TIME ALLOWED: 3 Hours

INSTRUCTION: Answer Question ONE (1) and any other THREE (3) Questions

1. Describe the following types of polymorphism. 25marks

i. Human blood groups. 10marks

ii. Duffy system. 5marks

iii. Write an essay on the origin of supergenes. 10marks

2a. Outline Polygenic Inheritance. 9marks

2b. Explain Environment and Gene Expression. 6marks

3a. Describe the term Epistasis. 5marks

3b. Explain the Multiple alleles. 10marks

4a. Outline Haldane's Rule of Hybrid gender. 7marks

4b. Explain the genetics of reproductive isolation barriers. 8marks

5a. Describe Temporal or habitat isolation. 8marks

5b. Write a short note on the Multiple mechanisms. 7marks

6a. Write an essay on Hybrid sterility. 8marks

6b. Explain briefly Zygote mortality and non-viability of hybrids. 7marks